TRICHOBEZOAR AND ITS SURGICAL MANAGEMENT IN A DOG

Mohd. Shafiuzama, M. Shiju Simon, S. Sooryadas and R. Suresh Kumar

Department of Veterinary Surgery and Radiology,
Madras Veterinary College, Chennai -7.

ABSTRACT

A seven-year old male Dachshund weighing 10 kg was presented with the history of depression, anorexia, frequent emesis and obstipation for the past two days. Abdominal palpation revealed a palpable sausage shaped mass inside. Radiographic studies revealed outflow obstruction of the intestine. Under general anaesthesia, a trichobezoar - at the level of distal duodenum and proximal jejunum, was removed through a mid-ventral celiotomy.

KEY WORDS – *trichobezoar, dog, intestinal obstruction, surgical correction*

INTRODUCTION

Intestinal obstruction causes a variety of dramatic and life threatening electrolyte disturbances; also endotoxic and septic shock (Burrows and Merrit, 1992). A wide variety of foreign objects may be ingested, particularly by young animals. Once the object has passed through the pylorus, the next smallest lumen is the distal duodenum and proximal jejunum - a common site for obstruction (Orsher and Rosin , 1984). Foreign bodies are noticed in puppies and kittens because of indiscriminate eating habits (Gary, 1983). Foreign body obstruction in the intestines causes venous obstruction leading to necrosis of the wall (Williams and Sargent , 1963). The present paper reports the surgical removal of foreign body.

CASE HISTORY AND OBSERVATIONS

A seven year old male Dachshund weighing 1[illegible]t Unit of Madras Veterinary College Teaching Hospital, w[illegible]s and obstipation for the past two days. The animal w[illegible]d congested conjunctival mucous membrane, with norm[illegible]d respiration rate. Abdominal palpation revealed a sausa[illegible]e revealed contrast filled duodenum and jejunum ev[illegible]al obstruction.

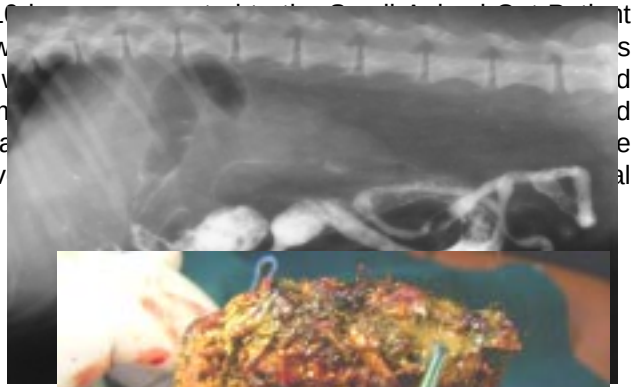

Fig-1

Fig-2

ANAESTHESIA AND SURGICAL PROCEDURE

The animal was premedicated with atropine sulphate @ 0.04 mg/kg b.wt intramuscularly, followed ten minutes later by intravenous injection of 1% propofol “to effect” general anaesthesia, which came to a dose of 4.5 mg/kg body weight. Anaesthesia was maintained with 1.5% to 2% isoflurane in 100% oxygen. Cefotaxime was administered intravenously at a dose rate of 20 mg/kg for a perioperative antibiotic umbrella.

A mid-ventral celiotomy incision was made from xiphoid extending towards the pubis. Exploration revealed the site of obstruction at the distal duodenum and proximal jejunum. The segment was isolated, exteriorized and soaked with normal saline. A full thickness longitudinal incision was made on the antimesentric border of the intestine in the viable tissue immediately distal to the obstruction. Suction was used to reduce the spillage. The obstruction was relieved by gentle pull on the foreign body through the enterotomy site, with simultaneous squeezing. Obstructive material consisted majority of hairs with few plastic threads (Fig. 2). Intestinal viability was assessed by colour, arterial pulsation and intestinal contraction. The enterotomy site was apposed using 3-0 size chromic catgut in a continuous pattern. Line-alba and subcutis incision were apposed by No 1 PGA. The skin incision was apposed with braided silk. Animal had an uneventful recovery.

RESULTS AND DISCUSSION

Plain radiograph revealed gas and fluid distended area in the intestine. Intestinal obstruction could be confirmed from the barium contrast study. Young puppies and kittens are mostly predisposed to intestinal obstruction (Gary, 1983) due to foreign bodies because of their indiscriminate eating habits. But the present case was that of a seven year old dog, which was not in accordance with the previous said report**.** The majority of the obstructive material consisted of hairs, hence was named as trichobezoar. This dog was always housed indoors and left alone during the daytime, since the owners were away from the house for the majority of the day hours. It was thus assumed that loneliness of the dog might have induced this vice of chewing inanimate objects which had resulted in this condition.

Intestinal foreign bodies, apart from causing electrolyte disturbances, damage the intestinal walls and inhibit the normal propulsive and segmental motility (Batt et al., 1985). Clinical signs vary depending upon the degree of obstruction and vascular damage. If the obstruction is complete, there will be extensive accumulation of fluid and gas proximal to site of obstruction; and if it is partial, animal may have diarrhoea. Vomition may be profuse, as with complete obstruction of proximal small intestine or sporadic as with proximal obstruction of the distal small intestine. Vomiting causes dehydration and weakness. In the present case the animal was not passing faeces, suggesting that it had complete obstruction; also it had frequent vomiting, leading to suspicion of obstruction. This was also confirmed by the contrast radiography.

Intestinal foreign bodies may block the mesenteric blood circulation, followed by necrosis. The necrotic area allows bacteria and their product pass into the peritoneal cavity and systemic circulation (Lantz , 1981). This was not encountered in this case. Viability could be assessed by colour, arterial pulsation and intestinal contraction.

Dogs which are housed indoors and presented with complaint of vomiting and obstipation should be suspected for intestinal foreign bodies. This may be due to the voice of chewing inanimate objects to get rid of their loneliness when left alone during the day.

REFERENCES

Batt, R. M. Colin ., F. B and. Robert G. S. (1985).. *Res. Vet. Sci.* **39***:* 80.

Burrows, C. F and. Merritt A. M. (1992). Assessment of gastrointestinal function. In Veterinary gastroenterology ,2nd ed., Ed.by Anderson NVed Philadelphia, Lea and Febiger, pp 16-42.

Gary, W. E. (1983). Intestine, by Bojrab, M. J ,In *Current Techniques in Small Animal Surgery*, 4th ed., Philedelphia, p 245.

Lantz, G. C., (1981).. *Comp. Cont. Educ. Pract.* Vet, **3**: 90.

Orsher, R. J., and Rosin, E (1984). *Vet Surg*. **13:** 222.

Williams, R. D and. Sargent F. T. (1963). *J Trauma*. **3**: 288.

❑